State of California
REGIONAL WATER QUALITY CONTROL BOARD SANTA ANA REGION

2001-2002

ANNUAL REPORT

FOR

DISCHARGES OF STORM WATER RUNOFF ASSOCIATED WITH NEW DEVELOPMENTS IN THE SAN JACINTO WATERSHED, ORDER NO. 01-34, NPDES NO. CAG 618005

Reporting Period July 1, 2001 through June 30, 2002

An annual report is required to be submitted to the Santa Ana Regional Water Quality Control Board (Regional Board) by August 1 of each year. The annual report shall include all inspection reports, all analytical data (of the preceding consecutive 12-month period), any proposed revisions to the SWPPP, and a compliance certification. This document must be certified and signed, under penalty of perjury, by the appropriate official of your company. Many of the Annual Report questions require an explanation. Please provide explanations on a separate sheet if necessary. **Retain a copy of the completed Annual Report for your records.**

If any information contained in Items A, B, and C below differs from the information provided in your Notice of Intent (NOI), circle or highlight the information that differs from your NOI so we can update our records. Please remember that a Notice of Termination and new Notice of Intent are required whenever a construction projected is completed and changes ownership.

If you have any questions, please contact your Regional Board Storm Water San Jacinto Program Contacts. The names, telephone numbers and e-mail addresses of the contacts are indicated on the last page of this Annual Report form.

GENERAL INFORMATION:

A. Site Location/information:

Site WDID No:_____

Site/ Project Name:_____ Contact Person:_____

Physical Address:_____ Title:_____

City:_____ State: _____ Zip:_____ Phone: (___)_____

Total size of construction site area (acres) _____ Tract Number(s): _____

Type of Construction: ☐ Residential ☐ Commercial ☐ Industrial ☐ Reconstruction
☐ Utility ☐ Transportation ☐ Other _____

B. Property Owner Information:

Owner Name:_____ Contact Person:_____

Mailing Address:_____ Title:_____

City:_____ State:_____ Zip:_____ Phone: (___)_____

C. Developer/Contractor/Discharger Information:

Developer/Contractor_____ Contact Person:_____

Mailing Address:_____ Title:_____

City:_____ State:_____ Zip:_____ Phone: (___)_____

SPECIFIC INFORMATION

D. Is this your last annual report? ☐ YES ☐ NO

ATTACHMENTS PROVIDED WITH THIS ANNUAL REPORT:

E. Please check the reports that have been provided as attachments to this annual report.

1. Inspection reports ---------- ☐
2. Location/map of collection and/or sampling ---------- ☐
3. Sampling analytical results from laboratory ---------- ☐
4. Revisions to the SWPPP ---------- ☐
5. Reports of non-compliance and exceedance ---------- ☐
6. Others, please specify : _____

MONITORING AND REPORTING PROGRAM

F. SAMPLING AND ANALYSIS RESULTS

1. Does your storm water discharge directly to Lake Elsinore and/or Canyon Lake which are listed in 303(d) as impaired? ☐ Lake Elsinore ☐ Canyon Lake ☐ No, go to #3.
2. If yes, did your SWPPP prescribe monitoring and sampling according to Board Resolution 2001-046? (for sediment/siltation and turbidity) ☐ YES ☐ NO, **attach explanation**.
3. Did you conduct background and/or run-on monitoring in your site? ☐ YES ☐ NO, **explain below**.

_____

4. How many storm events did you sample? _____ If less than 3, **explain below.**

_____

5. How many storm water discharge locations are at your facility? _____
6. For each storm event sampled, did you collect and analyze a sample from each of the facility's' storm water discharge locations? ☐ YES ☐ NO, **explain below**.

_____

7. Was sample collection or analysis reduced in accordance with Section B.2 of the San Jacinto Permit? (grouping of multiple storm water discharge locations that are similar). ☐ YES ☐ NO, go to #8.

   If "YES", refer to SWPPP section and page where selection criteria or justification is discussed. _____

8. Please identify when all samples were collected after storm event:

   - first hour after storm event during daylight hours ---------- ☐
   - first two hours after storm event during daylight hours ---------- ☐
   - variable, **explain below** ---------- ☐

   _____
   _____
   _____
   _____
   _____
   _____

9. Were there any discharges of stormwater that had been temporarily stored or contained? (such as from a basin) ☐ YES ☐ NO

10. Did you collect and analyze samples of temporarily stored or contained storm water discharges? ☐ YES ☐ NO, **explain below**.

    _____
    _____
    _____
    _____
    _____
    _____
    _____

11. Section B.2. of the San Jacinto Permit requires you to analyze storm water samples for total suspended solids, total inorganic nitrogen, total phosphorus, acute toxicity, fecal and total coliform, and pH.

    a. Did you analyze all storm water samples for the applicable parameters listed above (#11)? ☐ YES ☐ NO, **explain below**.

    _____
    _____
    _____
    _____
    _____
    _____
    _____

12. For each storm event sampled for the parameters above (#11), attach a copy of the laboratory analytical reports and report the sampling and analysis results using **Form 1**. The following must be provided for each sample collected:

    - Date and time of sample collection
    - Name and title of sampler
    - Parameters tested
    - Name of analytical testing laboratory
    - Discharge location identification
    - Testing results
    - Test methods used
    - Test detection limits
    - Date of testing
    - Copies of the laboratory analytical results

13. Board Resolution 2001-046 (Modifications to Water Quality Order 99-08-DWQ, NPDES general permit for storm water discharges associated with construction activity), Section B.7 requires a site discharging directly into 303(d) listed body of water impaired for sediments to sample for sedimentation/siltation, and a body impaired for turbidity to sample for turbidity.

    Did your SWPPP include sampling and monitoring under this order? ☐ YES ☐ NO, go to #17.

    If yes, please indicate the parameters for which samples have been tested.

    a. Settleable Solids (ml/l) ---------- ☐ YES ☐ NO
    b. Total Suspended Solids (mg/l) ---------- ☐ YES ☐ NO
    c. Suspended Sediment Concentration (mg/l) ---------- ☐ YES ☐ NO
    d. Turbidity (NTU) ---------- ☐ YES ☐ NO

14. Were samples analyzed for the above parameters (#13) collected during the first two hours of discharge of storm events? ☐ YES ☐ NO, **explain below**.

15. Were samples analyzed for the above parameters (#13) taken in the receiving waters representative of the prevailing conditions of the water body? ☐ YES ☐ NO, **explain below**.

16. For each storm event sampled for the parameters above (#13), attach a copy of the laboratory analytical reports and report the sampling and analysis results using **Form 2**. The following must be provided for each sample collected:

    - Date and time of sample collection
    - Name and title of sampler
    - Parameters tested
    - Name of analytical testing laboratory
    - Discharge location identification
    - Testing results
    - Test methods used
    - Test detection limits
    - Date of testing
    - Copies of the laboratory analytical results

17. Board Resolution 2001-046, Section B.8, requires sampling when non-visible pollutants from the construction site contact storm water and run-off discharges from the site. This can occur:

    - when a BMP is not properly implemented, breaches or malfunctions, such that leaks and/or spills result in the discharge of pollutants, that are not visually detectable in storm water, to surface waters;
    - when soil amendments (such as lime or gypsum) with the potential to elevate pH are used on the project,
    - when storm water contacts stored materials or wastes and run off of the construction site.

a. Did you sample for non-visible pollutants? ☐ YES ☐ NO, **explain below, then go to Section G.**

_____
_____
_____
_____
_____
_____
_____
_____

b. If yes, identify non-visible pollutants[1] :

_____ _____
_____ _____
_____ _____
_____ _____
_____ _____

18. For each storm event sampled for the parameter listed above (#17.b), attach a copy of the laboratory analytical reports and report the sampling and analysis results using **Form 2**. The following must be provided for each sample collected:

- Date and time of sample collection
- Name and title of sampler
- Parameters tested
- Name of analytical testing laboratory
- Discharge location identification
- Testing results
- Test methods used
- Test detection limits
- Date of testing
- Copies of the laboratory analytical results

G. INSPECTIONS AND VISUAL OBSERVATIONS:

1. Inspections

Section A.10 of the San Jacinto permit [2]requires inspections of the construction site and all BMPs to be performed before and after storm events and once each 24-hour period during extended storm discharges.

a. Did you submit all inspection reports for this annual report? ☐ YES ☐ NO, **please explain below.**

_____
_____
_____
_____
_____
_____

[1] Please see Table 1 for list of non-visible pollutants in construction activities.

[2] Section A.10 of the San Jacinto Permit states that for each inspection required above, the discharger shall complete **an inspection checklist**. Your inspection checklist/report shall include:

- Inspection date
- Weather information: best estimate of storm event, duration of event, time elapsed since last storm, and approximate amount of rainfall (inches)
- Inspection location
- Description of inadequate BMPs
- Inspector's name, title, and signature
- When safe, list observations of all BMPs: erosion controls, sediment controls, chemical and waste controls, and non-storm water controls
- Otherwise, visual inspection at outfall, discharge points, or downstream locations
- Corrective actions required and taken
- SWPPP revised and updated

b. Did you conduct inspections before storm events? ☐ YES ☐ NO, **please explain below**.

c. Did you conduct inspections after storm events? ☐ YES ☐ NO, **please explain below**.

d. Did you conduct inspections once each 24-hour period during extended storm discharges after storm events? ☐ YES ☐ NO, **please explain below.**

2. Non-Storm Water Discharges

Section A.9 of the San Jacinto Permit requires that one time non-storm water discharges shall be monitored during the time that such discharges are occurring. These include a wide variety of sources, such as potable water line flushing, air conditioning condensate, landscape irrigation, diverted stream flows, passive foundation drains, agricultural irrigation water, water from crawl spaces, street washdown, passive footing drains, non-commercial vehicle washing, emergency fire fighting flows, dechlorinated swimming pool discharges. Non-storm water or storm water contaminated by activities at the site, can also include: storm water with elevated pH levels from contact with soil amendments such as lime, gypsum, soil stabilizers, polymers, tackifiers; slurry from sawcutting of concrete or asphalt; washing of exposed aggregate concrete; concrete rinse water; building washing operations; equipment washing operations; minor street washing associated with street delineation; and/or sealing and paving activities occurring during rains.

a. Were there any non-storm water discharges to receiving waters or storm drain system at your facility? ☐ YES ☐ NO, go to Compliance Evaluation.

b. Are details of the non-storm water discharges discussed in your attached inspection reports? ☐ YES ☐ NO

c. Identify authorized non-storm discharges occurring at your facility, as discussed in your SWPPP, and according to your inspections.

d. Identify unauthorized non-storm discharges occurring or have occurred at your facility.

e. Based upon the inspections, monitoring and repair, have each of the unauthorized non-storm water discharges been minimized through retention, eliminated, permitted, or discharged through the sanitary sewer, with the permission of the sewering agency?

☐ **YES, please explain below.** ☐ **No, please explain below.**

_____
_____
_____
_____
_____
_____

COMPLIANCE EVALUATION AND DETERMINATION

Section D of the San Jacinto Permit states that compliance determination shall be based on self-monitoring programs and compliance inspections. The checklist below recommends steps necessary to complete compliance determination. Indicate whether you have performed each step below. **Fill-up Form 3 and attach an explanation for any "NO" answers.**

1. Have you inspected all potential pollutant sources and construction activities areas? ☐ YES ☐ NO
   The following areas should be inspected:

   - areas where spills and leaks have occurred during the last year
   - construction entrances
   - outdoor wash and rinse areas
   - construction material loading, unloading, and access areas.
   - storage of soil or waste
   - erosion areas, such as piles and unprotected slopes
   - waste handling and disposal areas
   - vehicle storage and service areas
   - equipment storage, cleaning, and maintenance areas
   - construction material storage and disposal
   - sediment basins/ponds or infiltration basins
   - non-storm water discharge generating areas
   - dust/particulate generating areas

2. Have you reviewed your SWPPP to assure that its BMPs address existing potential pollutant sources and construction activities areas? ☐ YES ☐ NO

3. Have you inspected the entire facility to verify that the SWPPP's site map is up-to-date? The following site map items should be verified: ☐ YES ☐ NO

   - facility boundaries
   - outline of all storm water drainage areas
   - areas impacted by run-on
   - storm water discharges locations
   - storm water collection and conveyance system
   - structural control measures such as catch basins, sediment basins, trenches, swales, berms, etc.

4. Have you reviewed all San Jacinto Permit compliance records generated since the last annual evaluation? ☐ YES ☐ NO

   The following records should be reviewed:

   - Inspection and monitoring reports
   - Sampling and analytical records
   - SWPPP revisions and implementation records

5. Have you reviewed the major elements of the SWPPP to assure compliance with the San Jacinto Permit? ☐ YES ☐ NO

   The following SWPPP items should be reviewed:

   - list of significant materials
   - description of potential pollutant sources
   - assessment of potential sources
   - identification and description of the BMPs to be implemented for each potential pollutant source
   - construction and BMP implementation schedules
   - updated list of contractors/subcontractors

6. Have you reviewed your SWPPP to assure that a) the BMPs are adequate in reducing or preventing pollutants in storm water discharges and authorized non-storm water discharges, and b) the BMPs are being implemented? ☐ YES ☐ NO

The following BMP categories should be reviewed:

- sediment control
- erosion control
- structural BMPs
- non-structural BMPs/ public education
- employee training
- inspection and preventative maintenance
- vehicle storage and service
- material handling and storage practices
- waste handling/storage and disposal
- non-storm water management
- quality assurance
- good housekeeping practices

H. ANNUAL CERTIFICATION

The facility operator is required to certify compliance with the San Jacinto Storm Water Permit. To certify compliance, both the SWPPP and Monitoring Program must be up to date and be fully implemented.

Based upon your compliance site inspection, monitoring and sampling, do you certify compliance with San Jacinto Storm Water Permit? ☐ YES ☐ NO

If you answered "NO" **please explain below** why you are not in compliance with the San Jacinto Permit, what actions have been taken, and when compliance will be achieved.

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

ANNUAL REPORT CERTIFICATION

"I am duly authorized to sign reports required by the San Jacinto Storm Water Construction Permit (see Section E.9 Standard Provisions/Signatory Requirements) and I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system or those persons directly responsible for gathering the information, to the best of my knowledge and belief, the information submitted is, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

Printed Name: _____

Signature: _____ Date: _____

Title: _____

DESCRIPTION OF BASIC ANALYTICAL PARAMETERS

I. Order No. 01-34 or the San Jacinto Storm Water Construction Permit (San Jacinto Permit) requires you to analyze storm water samples for at eight parameters. These are pH, Total Suspended Solids (TSS), Total Inorganic Nitrogen (TIN), Total Phosphorus (TP), Soluble Reactive Phosphorus (SRP), acute toxicity, fecal coliform, and total coliform. There are no numeric limitations for the parameters you test for.

The eight parameters, which the San Jacinto Permit requires to be tested, are considered *indicator* parameters. These parameters provide some indication whether pollutants are present in your storm water discharge, contributing to the impairment of Canyon Lake and Lake Elsinore. The following briefly explains what each of these parameters mean:

pH is a numeric measure of the hydrogen-ion concentration, and indicates the alkalinity or acidity of a substance. The neutral, or acceptable, range is within 6.5 to 8.5. At values less than 6.5, the water is considered acidic; above 8.5 it is considered alkaline or basic. An example of an acidic substance is vinegar, and an alkaline or basic substance is liquid antacid. The pH affects many chemical and biological processes in the water. Outside 6.5- to8.5, the physiological systems of most aquatic organisms are stressed and reproduction is reduced. Low pH can produce conditions that are toxic to aquatic life. There may be sources of materials or construction activities which could increase or decrease the pH of your storm water discharge. If the pH levels of your storm water discharge are high or low, you should conduct a thorough evaluation of all potential pollutant sources at your site.

Total Suspended Solids (TSS) is a measure in milligrams per liter (mg/l) of the undissolved or suspended solids that are present in your storm water discharge and which can be removed by filtration. The TSS test measures the concentration of the suspended solids in a water sample by measuring the dry weight of the solid material in a known volume of water sample. Sources of TSS may be natural and inorganic substances, such as soil particles or silt, organic substances such as algae, aquatic plant/animal waste, or man-made wastes such as industrial/sewage waste. It also includes sediment from erosion of exposed land, and dirt from impervious (i.e. paved) areas. Sediment by itself can be very toxic to aquatic life because it covers feeding and breeding grounds, and can smother organisms living on the bottom of a water body. Toxic chemicals and other pollutants also adhere to sediment particles. This provides a medium by which toxic or other pollutants end up in our water ways and ultimately in human and aquatic life. Suspended solids usually contribute directly to turbidity. TSS levels vary in runoff from undisturbed land. It has been shown that TSS levels increase significantly due to land development.

Total Inorganic Nitrogen is a measure of the total Nitrate (NO_3), Nitrite (NO_2), and ammonia (NH_3) concentrations, typically measured in milligrams per liter (mg/l) or micrograms per liter (μg/l). For planktonic algae, nitrate, nitrite, and ammonia are all very suitable sources of nitrogen for growth. Although these are essential plant nutrients, excessive amounts can cause significant water quality problems, such as dramatic increases in aquatic plant growth and changes in the types of plants and animals that live in the lake/stream. Excessive enrichment of lake by nutrients could lead to eutrophication which is which is the slow aging process during which a lake, estuary or bay evolves into a bog or marsh and eventually disappears.

- Nitrate is a chemical compound having the formula NO_3. High groundwater nitrate levels can cause the “Blue Baby Syndrome” or Methemoglobinemia in infants. Nitrate salts are used as fertilizers to supply a nitrogen source for plant growth. Other sources of nitrates include wastewater treatment plants, failing on-site septic systems, runoff from animal feedlots, industrial discharges containing corrosion inhibitors, and runoff from fertilized lawns and cropland. Because nitrates dissolve in water more readily than phosphates (which have an attraction for soil particles), nitrates serve as a better indicator of a source of sewage or manure pollution during dry weather.
- Ammonia is a form of nitrogen found in organic materials, sewage, and many fertilizers. It is the first form of nitrogen released when organic matter decays. Ammonia is an important aquatic plant nutrient because it is readily available; oxidizes to nitrite (NO_2) and converts rapidly to nitrate (NO_3) if oxygen is present. Ammonia is considerably more toxic to aquatic life than nitrate; it is toxic to fish at relatively low concentrations in pH-neutral or alkaline water.

Total Phosphorus is a test that measures all the forms of phosphorus in the sample (orthophosphate, condensed phosphate, and organic phosphate). Together with nitrogen, phosphorus is an essential nutrient for aquatic plants and animals. Increase of these nutrients can be very damaging to aquatic ecosystems, including accelerated plant growth, algae blooms, low dissolved oxygen, and death of certain fish, invertebrates and aquatic animals. Algae bloom is the rapid growth of algae on the surface of lakes, streams, or ponds, stimulated by nutrient enrichment (or due to an increase in plant nutrients such as nitrates and phosphates). It is associated with Eutrophication (see Nitrogen discussion above) and results in deterioration of water quality. Phosphorus is the key nutrient affecting the amount of algae and weed growth, and even a small increase can promote excessive aquatic plant growth. Sources of phosphorus include both natural and human. These include soil and rocks, wastewater treatment plants/sewage systems, human and animal waste, failing septic systems, detergents, water treatment animal feed lots or runoff from animal manure storage areas, runoff from fertilized lawns and cropland, and soil erosion. Total phosphorus is considered a better indicator of a lake's nutrient status because its levels remain more stable than soluble reactive phosphorus (see below). Total phosphorus includes soluble phosphorus and the phosphorus in plant and animal fragments suspended in lake water.

Soluble Reactive Phosphorus is a measure of the concentration of usable phosphorus (soluble Phosphates) contained in a body of water. It is a method-based term that describes what is actually measured when the test for orthophosphate is performed. Orthophosphate is the term that refers to the phosphate molecule, PO_4, by itself. Soluble reactive phosphorus dissolves in the water and readily aids plant growth. Its concentration varies widely in most lakes over short periods of time as plants take it up and release it.

Acute toxicity is a test to determine the concentration of effluent or receiving waters (for ambient water) that produces an adverse effect on a group of test organisms during a short-term exposure (e.g., 24, 48, or 96 hours). It is determined by exposing aquatic organisms to samples or dilutions of instream water or treated effluent. The end point is lethality. Acute toxicity is measured using statistical procedures (e.g., point estimate techniques or a t-test). Acute toxicity is usually defined as toxic unit acute, TUa = 100/LC50, where L50 is the toxicant concentration that would cause death in 50% of the test organisms. Adverse effects caused by conditions of temperature, dissolved oxygen, or nontoxic dissolved substances are excluded from the definition of toxicity.

Fecal Coliform Bacteria is a subset of the total coliform bacteria (see below) and is more fecal-specific in origin. This group of bacteria is normally present in large numbers in the intestinal tracts of humans and other warm-blooded animals. Although they are generally not harmful themselves, they indicate possible presence of pathogenic (disease-causing) bacteria that also live in human and animal digestive systems. In addition to possible health risks, fecal bacteria can also cause cloudy water, unpleasant odors, and an increase oxygen demand. Sources of fecal contamination to surface waters include wastewater treatment plants, on-site septic systems, domestic and wild animal manure, and storm water runoff.

Total Coliform is the sum of a group of microorganisms or bacteria (Colon bacilli or Escherichia coli and similar gram negative bacteria that are normal inhabitants of fecal discharges) usually found in the colons of warm-blooded animals and humans. All members of the total coliform group can occur in human feces, but some can also be present in animal manure, soil, and submerged wood and in other places outside the human body. As indicators, the non-pathogenic microorganisms are used in testing water samples to indicate the presence of waterborne pathogenic (disease-causing) organisms. For drinking water, total coliforms are still the standard test because their presence indicates contamination of a water supply by an outside source.

II. Board Resolution 2001-046 requires developers discharging directly into a 303(d) list impaired body of water to sample for sediment/siltation and turbidity as measured by Settleable Solids (SS), Total Suspended Solids (TSS), Suspended Sediment Concentration (SSC), and Turbidity. The following lists what these parameters mean:

Total Suspended Solids (TSS) - see previous discussion in I.

Settleable Solids (SS) refer generally to all solids in a liquid that can be removed by stilling the liquid. Bits of debris, sediment, or other solids that are heavy enough, sink when a liquid waste is allowed to stand in a pond or tank. Settleable solids is typically tested by placing a one-liter water sample into an Imhoff settling cone, and measuring the volume that settles by gravity to the bottom in one hour. Results are reported either as weight, milligrams per liter (mg/l) or volume, milliliter per liter (ml/l).

Suspended Sediment Concentration (SSC) is the concentration of suspended solid material in a water sample. It is tested by measuring the mass or weight of all of the dry sediment in a known volume of water-sediment mixture. The tests are typically measured at a given distance between the surface of the water and the bed, and results are expressed in milligrams of dry sediment per liter of water-sediment mixture (mg/l). The **SSC** method may be used alternatively or in addition to the **TSS** method.

Turbidity is a measure of water clarity and how the material suspended in water decreases the passage of light through the water. It is sometimes referred to as the cloudiness of water. The term "turbid" is applied to waters in which visual depth is restricted due to the suspended matter. The turbidity may be caused by a wide variety of suspended materials, such as clay, silt, finely divided organic and inorganic matter, soluble colored organic compounds, plankton and other microscopic organisms and similar substances. Turbidity in water has public health implications due to the possibilities of pathogenic bacteria, which are encased in the particles and escape disinfection processes. Turbidity interferes with water treatment (filtration), and affects aquatic life. Excessive amounts of turbidity also make water aesthetically objectionable since it affects the color of water. The degree of the turbidity of water is measured by a Turbidimeter, such as the Nephelometer which measures the intensity of light scattered at right angles to its path through a sample. The results are expressed in Nephelometric Turbidity Units or NTUs.

If you have any questions regarding whether or not your constituent concentrations are too high, please contact your local Regional Board office. The United States Environmental Protection Agency (USEPA) has published stormwater discharge benchmarks for a number of parameters. These benchmarks may be helpful when evaluating whether additional BMPs are appropriate. These benchmarks can be accessed at our website at http://www.swrcb.ca.gov. It is contained in the Sampling and Analysis Reduction Certification.

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FORM 1-SAMPLING & ANALYSIS RESULTS

FIRST STORM EVENT

- If analytical results are less than the detection limit (or non detectable), show the value as less than the numerical value of the detection limit (example: <.05)
- If you did not analyze for a required parameter, do not report "0". Instead, leave the appropriate box blank
- When analysis is done using portable analysis (such as portable pH meters, etc.), indicate "PA" in the appropriate test method used box.
- Make additional copies of this form as necessary.

NAME OF PERSON COLLECTING SAMPLE(S): _____ **TITLE:** _____ **SIGNATURE:** _____

DESCRIBE DISCHARGE LOCATION	DATE/TIME OF SAMPLE COLLECTION	TIME DISCHARGE STARTED	ANALYTICAL RESULTS For First Storm Event							
			SAN JACINTO POLLUTANTS OF CONCERN							
			pH	TSS	TIN	TP	SRP	Acute Toxicity	Fecal Colifrm	Total Colifrm
	__/__/__ ☐AM __:__ ☐PM	☐AM __:__ ☐PM								
	__/__/__ ☐AM __:__ ☐PM	☐AM __:__ ☐PM								
	__/__/__ ☐AM __:__ ☐PM	☐AM __:__ ☐PM								
TEST REPORTING UNITS:			**pH Units**	**mg/l**	**mg/l**	**mg/l**	**mg/l**		**MPN**	**MPN**
TEST METHOD DETECTION LIMIT:										
TEST METHOD USED:										
RWQCB BENCHMARK VALUE			6.5-8.5	100	8.0	2.0	0.2	Consult Water Board Staff	400	10,000
DATE OF TESTING: ANALYZED BY (LAB):										

TSS - Total Suspended Solids TIN – Total Inorganic Nitrogen TP – Total Phosphorus SRP – Soluble Reactive Phosphorus Colifrm –Coliform MPN-Most Probable Number

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FORM 1-SAMPLING & ANALYSIS RESULTS

SECOND STORM EVENT

- If analytical results are less than the detection limit (or non detectable), show the value as less than the numerical value of the detection limit (example: <.05)
- If you did not analyze for a required parameter, do not report "0". Instead, leave the appropriate box blank
- When analysis is done using portable analysis (such as portable pH meters, etc.), indicate "PA" in the appropriate test method used box.
- Make additional copies of this form as necessary.

NAME OF PERSON COLLECTING SAMPLE(S):_____ **TITLE:** _____ **SIGNATURE:** _____

DESCRIBE DISCHARGE LOCATION	DATE/TIME OF SAMPLE COLLECTION	TIME DISCHARGE STARTED	ANALYTICAL RESULTS For Second Storm Event							
			SAN JACINTO POLLUTANTS OF CONCERN							
			pH	TSS	TIN	TP	SRP	Acute Toxicity	Fecal Colifrm	Total Colifrm
	__/__/__ ☐AM ☐PM __:__	☐AM ☐PM __:__								
	__/__/__ ☐AM ☐PM __:__	☐AM ☐PM __:__								
	__/__/__ ☐AM ☐PM __:__	☐AM ☐PM __:__								
TEST REPORTING UNITS:			**pH Units**	**mg/l**	**mg/l**	**mg/l**	**mg/l**		**MPN**	**MPN**
TEST METHOD DETECTION LIMIT:										
TEST METHOD USED:										
RWQCB BENCHMARK VALUE			6.5-8.5	100	8.0	2.0	0.2	Consult Water Board Staff	400	10,000
DATE OF TESTING: ANALYZED BY (LAB):										

TSS - Total Suspended Solids TIN – Total Inorganic Nitrogen TP – Total Phosphorus SRP – Soluble Reactive Phosphorus Colifrm –Coliform MPN-Most Probable Number

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FORM 1-SAMPLING & ANALYSIS RESULTS

THIRD STORM EVENT

- If analytical results are less than the detection limit (or non detectable), show the value as less than the numerical value of the detection limit (example: <.05)
- If you did not analyze for a required parameter, do not report "0". Instead, leave the appropriate box blank
- When analysis is done using portable analysis (such as portable pH meters, etc.), indicate "PA" in the appropriate test method used box.
- Make additional copies of this form as necessary.

NAME OF PERSON COLLECTING SAMPLE(S):_____ **TITLE:** _____ **SIGNATURE:** _____

DESCRIBE DISCHARGE LOCATION	DATE/TIME OF SAMPLE COLLECTION	TIME DISCHARGE STARTED	ANALYTICAL RESULTS For Third Storm Event							
			SAN JACINTO POLLUTANTS OF CONCERN							
			pH	TSS	TIN	TP	SRP	Acute Toxicity	Fecal Colifrm	Total Colifrm
	__/__/__ ☐AM ☐PM __:__	☐AM ☐PM __:__								
	__/__/__ ☐AM ☐PM __:__	☐AM ☐PM __:__								
	__/__/__ ☐AM ☐PM __:__	☐AM ☐PM __:__								
TEST REPORTING UNITS:			**pH Units**	**mg/l**	**mg/l**	**mg/l**	**mg/l**		**MPN**	**MPN**
TEST METHOD DETECTION LIMIT:										
TEST METHOD USED:										
RWQCB BENCHMARK VALUE			6.5-8.5	100	8.0	2.0	0.2	Consult Water Board Staff	400	10,000
DATE OF TESTING: ANALYZED BY (LAB):										

TSS - Total Suspended Solids TIN – Total Inorganic Nitrogen TP – Total Phosphorus SRP – Soluble Reactive Phosphorus Colfrm –Coliform MPN-Most Probable Number

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FORM 2-SAMPLING & ANALYSIS RESULTS
SEDIMENTATION/SILTATION, TURBIDITY AND NON-VISIBLE POLLUTANTS

FIRST STORM EVENT

- If analytical results are less than the detection limit (or non detectable), show the value as less than the numerical value of the detection limit (example: <.05)
- If you did not analyze for a required parameter, do not report "0". Instead, leave the appropriate box blank
- When analysis is done using portable analysis (such as portable pH meters, etc.), indicate "PA" in the appropriate test method used box.
- Make additional copies of this form as necessary.

NAME OF PERSON COLLECTING SAMPLE(S):_____ **TITLE:** _____ **SIGNATURE:** _____

DESCRIBE DISCHARGE LOCATION	DATE/TIME OF SAMPLE COLLECTION	TIME DISCHARGE STARTED	ANALYTICAL RESULTS For First Storm Event								
			303(D) POLLUTANTS OF CONCERN				PARAMETERS TO BE ANALYZED FOR NON-VISIBLE POLLUTANTS				
			SS	TSS	TURBIDITY	SSC					
	__/__/__ ☐AM ☐PM __:__	__:__ ☐AM ☐PM									
	__/__/__ ☐AM ☐PM __:__	__:__ ☐AM ☐PM									
	__/__/__ ☐AM ☐PM __:__	__:__ ☐AM ☐PM									
TEST REPORTING UNITS:			**ml/l**	**mg/l**	**NTU**	**mg/l**					
TEST METHOD DETECTION LIMIT:											
RECOMMENDED ANALYTICAL METHOD: (For specific EPA requirement, consult 40 CFR 136)			EPA 160.5	EPA 160.2	EPA 180.1	ASTM D 3977-97					
RWQCB BENCHMARK VALUE:											
DATE OF TESTING: ANALYZED BY (LAB):											

Use either TSS or SSC, or both, for suspended solids analysis. SS - Settleable Solids TSS - Total Suspended Solids SSC – Suspended Sediment Concentration

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FORM 2-SAMPLING & ANALYSIS RESULTS
SEDIMENTATION/SILTATION, TURBIDITY AND NON-VISIBLE POLLUTANTS

SECOND STORM EVENT

- If analytical results are less than the detection limit (or non detectable), show the value as less than the numerical value of the detection limit (example: <.05)
- If you did not analyze for a required parameter, do not report "0". Instead, leave the appropriate box blank
- When analysis is done using portable analysis (such as portable pH meters, etc.), indicate "PA" in the appropriate test method used box.
- Make additional copies of this form as necessary.

NAME OF PERSON COLLECTING SAMPLE(S): _____ **TITLE:** _____ **SIGNATURE:** _____

DESCRIBE DISCHARGE LOCATION	DATE/TIME OF SAMPLE COLLECTION	TIME DISCHARGE STARTED	ANALYTICAL RESULTS For Second Storm Event								
			303(D) POLLUTANTS OF CONCERN				PARAMETERS TO BE ANALYZED FOR NON-VISIBLE POLLUTANTS				
			SS	TSS	TURBIDITY	SSC					
	__/__/__ ☐AM __:__ ☐PM	☐AM __:__ ☐PM									
	__/__/__ ☐AM __:__ ☐PM	☐AM __:__ ☐PM									
	__/__/__ ☐AM __:__ ☐PM	☐AM __:__ ☐PM									
TEST REPORTING UNITS:			**ml/l**	**mg/l**	**NTU**	**mg/l**					
TEST METHOD DETECTION LIMIT:											
RECOMMENDED ANALYTICAL METHOD: (For specific EPA requirement, consult 40 CFR 136)			EPA 160.5	EPA 160.2	EPA 180.1	ASTM D 3977-97					
RWQCB BENCHMARK VALUE:											
DATE OF TESTING: ANALYZED BY (LAB):											

Use either TSS or SSC, or both, for suspended solids analysis. SS - Settleable Solids TSS - Total Suspended Solids SSC – Suspended Sediment Concentration

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FORM 2-SAMPLING & ANALYSIS RESULTS
SEDIMENTATION/SILTATION, TURBIDITY AND NON-VISIBLE POLLUTANTS

THIRD STORM EVENT

- If analytical results are less than the detection limit (or non detectable), show the value as less than the numerical value of the detection limit (example: <.05)
- If you did not analyze for a required parameter, do not report "0". Instead, leave the appropriate box blank
- When analysis is done using portable analysis (such as portable pH meters, etc.), indicate "PA" in the appropriate test method used box.
- Make additional copies of this form as necessary.

NAME OF PERSON COLLECTING SAMPLE(S):_____ **TITLE:** _____ **SIGNATURE:** _____

DESCRIBE DISCHARGE LOCATION	DATE/TIME OF SAMPLE COLLECTION	TIME DISCHARGE STARTED	ANALYTICAL RESULTS For Third Storm Event								
			303(D) POLLUTANTS OF CONCERN				PARAMETERS TO BE ANALYZED FOR NON-VISIBLE POLLUTANTS				
			SS	TSS	TURBIDITY	SSC					
	__/__/__ ☐AM ☐PM __:__	__:__ ☐AM ☐PM									
	__/__/__ ☐AM ☐PM __:__	__:__ ☐AM ☐PM									
	__/__/__ ☐AM ☐PM __:__	__:__ ☐AM ☐PM									
TEST REPORTING UNITS:			**ml/l**	**mg/l**	**NTU**	**mg/l**					
TEST METHOD DETECTION LIMIT:											
RECOMMENDED ANALYTICAL METHOD: (For specific EPA requirement, consult 40 CFR 136)			EPA 160.5	EPA 160.2	EPA 180.1	ASTM D 3977-97					
RWQCB BENCHMARK VALUE:											
DATE OF TESTING: ANALYZED BY (LAB):											

Use either TSS or SSC, or both, for suspended solids analysis. SS - Settleable Solids TSS - Total Suspended Solids SSC – Suspended Sediment Concentration

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SIDE A

FORM 3 - SELF MONITORING, AND COMPLIANCE INSPECTION DETERMINATION
POTENTIAL POLLUTANT SOURCE/CONSTRUCTION ACTIVITY BMP STATUS

EVALUATION DATE: ___/___/___ **INSPECTOR NAME:** _____ **TITLE:** _____ **SIGNATURE:** _____

POTENTIAL POLLUTANT SOURCE/CONSTRUCTION ACTIVITY AREA (as identified in your SWPPP)			Describe deficiencies in BMPs or BMP implementation	Describe additional/revised BMPs or corrective actions and their date(s) of implementation
	HAVE ANY BMPs NOT BEEN FULLY IMPLEMENTED? ☐ YES ☐ NO	If yes, to either question, complete the next two columns of this form		
	ARE ADDITIONAL/REVISED BMPs NECESSARY? ☐ YES ☐ NO			
POTENTIAL POLLUTANT SOURCE/CONSRUCTION ACTIVITY AREA (as identified in your SWPPP)				
	HAVE ANY BMPs NOT BEEN FULLY IMPLEMENTED? ☐ YES ☐ NO	If yes, to either question, complete the next two columns of this form	**Describe deficiencies in BMPs or BMP implementation**	**Describe additional/revised BMPs or corrective actions and their date(s) of implementation**
	ARE ADDITIONAL/REVISED BMPs NECESSARY? ☐ YES ☐ NO			
POTENTIAL POLLUTANT SOURCE/CONSTRUCTION ACTIVITY AREA (as identified in your SWPPP)				
	HAVE ANY BMPs NOT BEEN FULLY IMPLEMENTED? ☐ YES ☐ NO	If yes, to either question, complete the next two columns of this form	**Describe deficiencies in BMPs or BMP implementation**	**Describe additional/revised BMPs or corrective actions and their date(s) of implementation**
	ARE ADDITIONAL/REVISED BMPs NECESSARY? ☐ YES ☐ NO			
POTENTIAL POLLUTANT SOURCE/CONSTRUCTION ACTIVITY AREA (as identified in your SWPPP)				
	HAVE ANY BMPs NOT BEEN FULLY IMPLEMENTED? ☐ YES ☐ NO	If yes, to either question, complete the next two columns of this form	**Describe deficiencies in BMPs or BMP implementation**	**Describe additional/revised BMPs or corrective actions and their date(s) of implementation**
	ARE ADDITIONAL/REVISED BMPs NECESSARY? ☐ YES ☐ NO			

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SIDE B

FORM 3 (cont) - SELF MONITORING, AND COMPLIANCE INSPECTION DETERMINATION
POTENTIAL POLLUTANT SOURCE/CONSTRUCTION ACTIVITY BMP STATUS

EVALUATION DATE: ____/____/____ **INSPECTOR NAME:** ______________________ **TITLE:** ______________________ **SIGNATURE:** ______________________

POTENTIAL POLLUTANT SOURCE/CONSTRUCTION ACTIVITY AREA (as identified in your SWPPP)	**HAVE ANY BMPs NOT BEEN FULLY IMPLEMENTED?** ☐ **YES** ☐ **NO** **ARE ADDITIONAL/REVISED BMPs NECESSARY?** ☐ **YES** ☐ **NO**	If yes, to either question, complete the next two columns of this form	**Describe deficiencies in BMPs or BMP implementation**	**Describe additional/revised BMPs or corrective actions and their date(s) of implementation**
POTENTIAL POLLUTANT SOURCE/CONSTRUCTION ACTIVITY AREA (as identified in your SWPPP)	**HAVE ANY BMPs NOT BEEN FULLY IMPLEMENTED?** ☐ **YES** ☐ **NO** **ARE ADDITIONAL/REVISED BMPs NECESSARY?** ☐ **YES** ☐ **NO**	If yes, to either question, complete the next two columns of this form	**Describe deficiencies in BMPs or BMP implementation**	**Describe additional/revised BMPs or corrective actions and their date(s) of implementation**
POTENTIAL POLLUTANT SOURCE/CONSTRUCTION ACTIVITY AREA (as identified in your SWPPP)	**HAVE ANY BMPs NOT BEEN FULLY IMPLEMENTED?** ☐ **YES** ☐ **NO** **ARE ADDITIONAL/REVISED BMPs NECESSARY?** ☐ **YES** ☐ **NO**	If yes, to either question, complete the next two columns of this form	**Describe deficiencies in BMPs or BMP implementation**	**Describe additional/revised BMPs or corrective actions and their date(s) of implementation**
POTENTIAL POLLUTANT SOURCE/CONSTRUCTION ACTIVITY AREA (as identified in your SWPPP)	**HAVE ANY BMPs NOT BEEN FULLY IMPLEMENTED?** ☐ **YES** ☐ **NO** **ARE ADDITIONAL/REVISED BMPs NECESSARY?** ☐ **YES** ☐ **NO**	If yes, to either question, complete the next two columns of this form	**Describe deficiencies in BMPs or BMP implementation**	**Describe additional/revised BMPs or corrective actions and their date(s) of implementation**

Table 1[3]

List of Common Potential Non-visible Pollutants at Construction Projects

The following table represents potential sources of non-visible pollutants that are common to most construction sites. This list is not meant to be inclusive but to provide direction to construction site operators. Over the next year, the State Water Resources Control Board plans to conduct research into non-visible pollutants to provide further guidance and information on appropriate analytical and field tests for common construction pollutants.

List of Common Potential Non-visible Pollutants at Construction Projects

Category	**Potential Pollutant Source**	**Field Indicator of Pollutant Release**	**Laboratory Analysis**
Line Flushing	Chlorinated water	Colormetric Kit	Residual chlorine
Portable toilets	Bacteria, disinfectants	NA	Total/fecal coliform
Concrete & Mansonry	Acid wash	pH meter	PH PH, alkalinity
	Curring compounds	pH meter	Volatile organic compound (VOCs)
	Concrete rinse water	pH meter	pH
Painting	Resins	NA	Semi-volatile organic compounds (SVOCs)
	Thinners	Phenols kit	Phenols, VOCs
	Paint Strippers	NA	VOCs
	Solvents	Phenols kit	Phenols, VOCs
	Adhesives	Phenols kit	Phenols, SVOCs
	Sealants	NA	SVOCs
Cleaning	Detergents	Colorimetric kit	MBAS, phosphates
	Bleaches	Colorimetric kit	Residual chlorine
	Solvents	Phenols kit	VOCs
Landscaping	Pesticides/Herbicides	NA	Check with analytical laboratory
	Fertilizers	NA	NO3/NH3/P Acidity/alkalinity
	Lime and gypsum	pH meter	
	Aluminum sulfate, sulfur	Total dissolved solids (TDS), pH	TDS, alkalinity
Treated wood	Copper, arsenic, selenium	Metals test kits may be available	Metals
Soil amendments & dust control	Lime, gypsum	pH meter	pH
	Plant gums	NA	Biochemical oxygen demand (BOD)
	Magnesium chloride	TDS	Alkalinity, TDS
	Calcium chloride	TDS	Alkalinity, TDS
	Natural brines	TDS	Alkalinity, TDS
	Lignosulfonates	TDS	Alkalinity, TDS

[3] Adapted from California Stormwater Quality Task Force, October 2001: "Construction Storm Water Sampling and Analysis Guidance Document"

Storm Water Contacts

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For questions on the San Jacinto Permit, please call or e-mail any of the following Water Board staff.

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